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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.								
10/730,704	12/08/2003	Ravi P. Nargund	21151	3989								
210 MERCK AND CO., INC P O BOX 2000 RAHWAY, NJ 07065-0907	7590 10/15/2007		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">SPIVACK, PHYLLIS G</td></tr><tr><td>ART UNIT</td><td>PAPER NUMBER</td></tr><tr><td>1614</td><td></td></tr></table>		EXAMINER		SPIVACK, PHYLLIS G		ART UNIT	PAPER NUMBER	1614	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/730,704	Applicant(s) NARGUND ET AL.	
	Examiner Phyllis G. Spivack	Art Unit 1614	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 49-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 49-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Applicant's Amendment filed July 30, 2007 is acknowledged. Claims 1-48 and 54 to 66 are canceled. Claims 49-53 remain under consideration, drawn to methods of treatment of obesity of a non-diabetic etiology, comprising administering the compositions comprising the elected combination, AM251 and phentermine. As set forth in the first Office Action, methods of use drawn to non-elected inventions, i.e., methods other than treating obesity, are withdrawn from consideration by the Examiner.

A Declaration under 37 CFR §1.132, filed July 30, 2007 by Dr. Alison M. Strack, is further acknowledged.

Claims 49-53 were rejected under 35 U.S.C. 103(a) as being unpatentable over Clark et al., U.S. Patent 5,597,797, and Hjorth et al., Society for Neuroscience Abstract Viewer and Itinerary Planner, in the last Office Action. It was asserted Clark teaches the co-administration of various appetite suppressants, such as phentermine, which may be combined with growth hormone and IGF-I, to treat or prevent obesity. See column 16, lines 26-65, as well as column 31, lines 55-57, where Clark teaches combination treatment results by far in the greatest loss of fat, suggesting a synergistic effect on fat loss. As required by instant claim 53, Clark teaches treatment of obesity-related disorders, such as polycystic ovarian disease or insulin resistance. See column 7, lines 56-67. Hjorth teaches the administration of the compound **AM 251**, 1-(2,4-dichlorophenyl)-5-(4-iodophenyl)-4-methyl-N-1-piperidinyl-1H-pyrazole-3-carboxamide, an inverse agonist at cannabinoid CB<sub>1</sub> receptors, results in weight loss.

The combined teachings of Clark and Hjorth provide motivation to one skilled in the art to prepare and administer a composition comprising a combination of

phentermine and AM 251 with a reasonable expectation of treating obesity. In the absence of evidence to the contrary, it is *prima facie* obvious to use in combination two or more compounds that have previously been used separately for the same purpose. See *In re Kerkhoven*, 205 USPQ 1069. It is not inventive to combine old ingredients of known properties. This is especially true in the field of obesity where combination therapies of known ingredients are conventional. A supra additive effect is not herein claimed.

Applicants argue Clark does not teach or suggest cannabinoid-1 receptor antagonists/inverse agonists in general, or AM251 specifically, as monotherapy, or as a combination therapy to treat obesity. Further, Applicants urge there is no motivation in Hjorth to use AM251 in combination with phentermine. Applicants argue it is not predictable that adding a second anti-obesity agent that works via a different biological mechanism will result in additional or additive weight loss or food intake reduction.

A discussion of sibutramine and/or orlistat is not herein under consideration.

Combination therapy for the treatment of obesity is established as more beneficial than administering single agents. Najarian, T., WO 00/076493, and U.S. Patent 5,795,895, are provided only for evidentiary purposes, and clearly show combination therapy with phentermine to be conventional practice in the treatment of obesity. See Examples 1-4, pages 20-26, where Najarian teaches supra additive weight loss following combination therapy with phentermine and a second weight loss agent that acts through an entirely different mechanism of action. The combination of

two agents that affect energy homeostasis based on different biological mechanisms of action is expected to be advantageous in the treatment of obesity compared with two agents that produce an effect through the same pathway.

It was previously asserted although both compounds are taught in the prior art to be useful in the induction of weight loss, there was no showing of unexpected results commensurate in scope with the claims.

In response, A Declaration under 37 CFR §1.132 by Dr. Alison M. Strack, has been presented, which show four Exhibits in the form of graphs to support the claimed invention.

Dr. Strack states Exhibits 1, 2 and 3 are drawn to the effect of the combination of AM251 and phentermine on body weight and food intake, and states the combination produced a greater inhibition of body weight gain than either treatment alone. Dr. Strack further urges the data analyses indicated that the *empirical* combination of AM 251 and phentermine exerted a supra additive effect, and there was greater food intake reduction observed than the *hypothetical* summation of each individual drug alone. With respect to Exhibit 4, Dr. Strack states the extent of the increased locomotion by phentermine was decreased when phentermine was co-dosed with AM251.

Based on the teachings of the instant specification (pages 2-3) and the evidence of record, the results indicated by Exhibits 1-4 would have been entirely expected by one skilled in the art. The present claims are drawn to treating obesity, not a reduction in food intake (Exhibit 3) or a decrease in locomotor activity (Exhibit 4). The showing is

not persuasive because greater inhibition of body weight gain by combination therapy with phentermine, as compared with monotherapy, would have been expected.

The rejection of record under 35 U.S.C. 103 is maintained.

No claim is allowed.

**THIS ACTION IS MADE FINAL.** Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this Final Action is set to expire THREE MONTHS from the mailing date of this Action. In the event a first reply is filed within TWO MONTHS of the mailing date of this Final Action and the Advisory Action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the Advisory Action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the Advisory Action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this Final Action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Phyllis G. Spivack whose telephone number is 571-272-0585. The Examiner can normally be reached from 10:30 to 7 PM.

If attempts to reach the Examiner by telephone are unsuccessful after one business day, the Examiner's supervisor, Ardin Marschel, can be reached 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 8, 2007

  
Phyllis G. Spivack  
**PHYLLIS SPIVACK**  
**PRIMARY EXAMINER**